

Remarks

Reconsideration of this application as amended is respectfully requested.

Claims 1-8 stand rejected under 35 U.S.C. §102(b) in view of "A Detailed Router for Field-Programmable Gate Arrays" by *Brown et al.*, 1990 IEEE International Conference on Computer-Aided Design ("Brown").

Claims 1-8 have been canceled. New claims 9-26 have been added.

The Examiner has objected to claims 1-6 and 8 due to a variety of grammatical errors. Applicant submits that new claims 9-26 employ proper grammar and clear definitions.

The Examiner has rejected claims 1-8 under 35 U.S.C. §102(b) as being anticipated by *Brown*. Applicant submits that new claim 9 is not anticipated by *Brown*. New claim 9 is a method for reducing space for holding a representation of a routing network. *Brown* does not disclose a method for reducing space for holding a representation of a routing network as claimed in new claim 9. Instead, *Brown* discloses an algorithm for routing connections in an FPGA. (See Abstract of *Brown*).

Applicant submits that the algorithm of *Brown* would operate in response to a representation of a routing network rather than generate a representation of a routing network as claimed in new claim 9. Figure 2 of *Brown* shows a model for representing routing elements of an FPGA but does not disclose any data structures for the model or any method for reducing the space consumption of the model. *Brown* does not disclose generating a shared data structure for representing a group of elements in the routing network as claimed in new claim 9. *Brown* does not disclose generating a set of unshared data structures each for representing a corresponding element in the routing

network that is not included in the group and storing a set of state information into each unshared data structure such that the state information enables the shared data structure to represent all of the elements in the group as claimed in new claim 9.

Given that new claims 10-17 depend from new claim 9, it is submitted that new claims 10-17 are not anticipated by *Brown*.

Applicant further submits that new claim 18 is not anticipated by *Brown* because new claim 18 includes limitations similar to the limitations of new claim 9. Therefore, the remarks stated above with respect to new claim 9 also apply to new claim 18.

Given that new claims 19-26 depend from new claim 18, it is submitted that new claims 19-26 are not anticipated by *Brown*.

It is respectfully submitted that in view of the amendments and arguments set forth above, the applicable objections and rejections have been overcome.

The Commissioner is authorized to charge any underpayment or credit any overpayment to Deposit Account No. 08-2025 for any matter in connection with this response which may be required.

Respectfully submitted,

Date: 12-18-03 By: Paul H. Horstmann
Paul H. Horstmann
Reg. No.: 36,167